Caution: Chemical Instability of Natural Biomolecules During Routine Analysis

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Supporting Information

Table S1. List of harvested *Frullania tamarisci* and *Conocephalum conicum* samples

Sample	Location	GPS Coodinates		Altitude (m)	Harvest Date (month-year)
		Frullania tamarisci			
S1	Restonica	9°07'45.9"E	42°17'18.0"N	400	June-15
S1.1					February-16
S1.2					March-16
S1.3					May-16
S1.4					June-16
S2	Vizzavona	9°06'18.8"E	42°05'52.6"N	1160	June-16
S3	Vivario	9°10'01.2"E	42°11'31.9"N	400	June-16
		Conocephalum conicum			
S1	Sant'andréa di Bozzio	9°17'41.96"E	42°17'51,03"	750	March-14
S1.1					June-15
S2	Vizzavona	9°7'52.3"E	42°7' 33.41" N	1000 to 1100	April-14
S2.1					June-15
S2.2					March-17
S2.3					January-18
S3	Corrano	9°3' 50.06" E	41°53' 35.86" N	320	April-15
S3.1					April-18
S4	Sorba	9°11' 24.89" E	41°58' 15.86" N	690	April-15
S4.1					April-18
S5	Frassetu	9°1' 14.33" E	41°53' 50.28" N	530	April-18

Table S2. Pacifigorgiane-like constituents detected in the Corsican *Frullania tamarisci* extracts

Compound [1]	LRIa [2]	RIa [3]	RIp [4]	% [5]			
				EO	HY	MAC	SPME
Pacifigorgia-1(9),10-diene (**5**)	1384	-	1526	0.13	-	3.80	1.50
Pacifigorgia-1,10-diene (**6**)	1400	1402	1517	0.91	-	0.18	5.80
Pacifigorgia-1(6),10-diene (**7**)	1414	1415	1538	0.88	-	-	4.50
Pacifigorgia-2,10-diene (**8**)	1422	1421	1553	0.90	-	1.00	6.10
Pacifigorgia-2(10),11-diene (**9**)	1435	1434	1658	0.73	-	0.97	3.50
Tamariscol (**1**)	1535	1533	1929	41.49	5.45	15.00	32.70
Pacifigorgiol (**2**)	1540	1533	1929	-	-	-	-

[1] Order of elution is given on apolar column (Rtx-1) [2]LRI_A: Literature retention indices on apolar column reported from literature [1]. [3]RI_A: Retention indices on Rtx-1 (apolar) column [4] RI_P: Retention indices on Rtx-Wax (polar) column [5]Percentages of individual components on Rtx-1 except pacifigorgiol with same Ri_a and Ri_P, this compound detected in NMR EO: Essential oil, HY: Hydrosol, MAC: diethyl oxide maceration, SPME: Solid Phase MicroExtraction

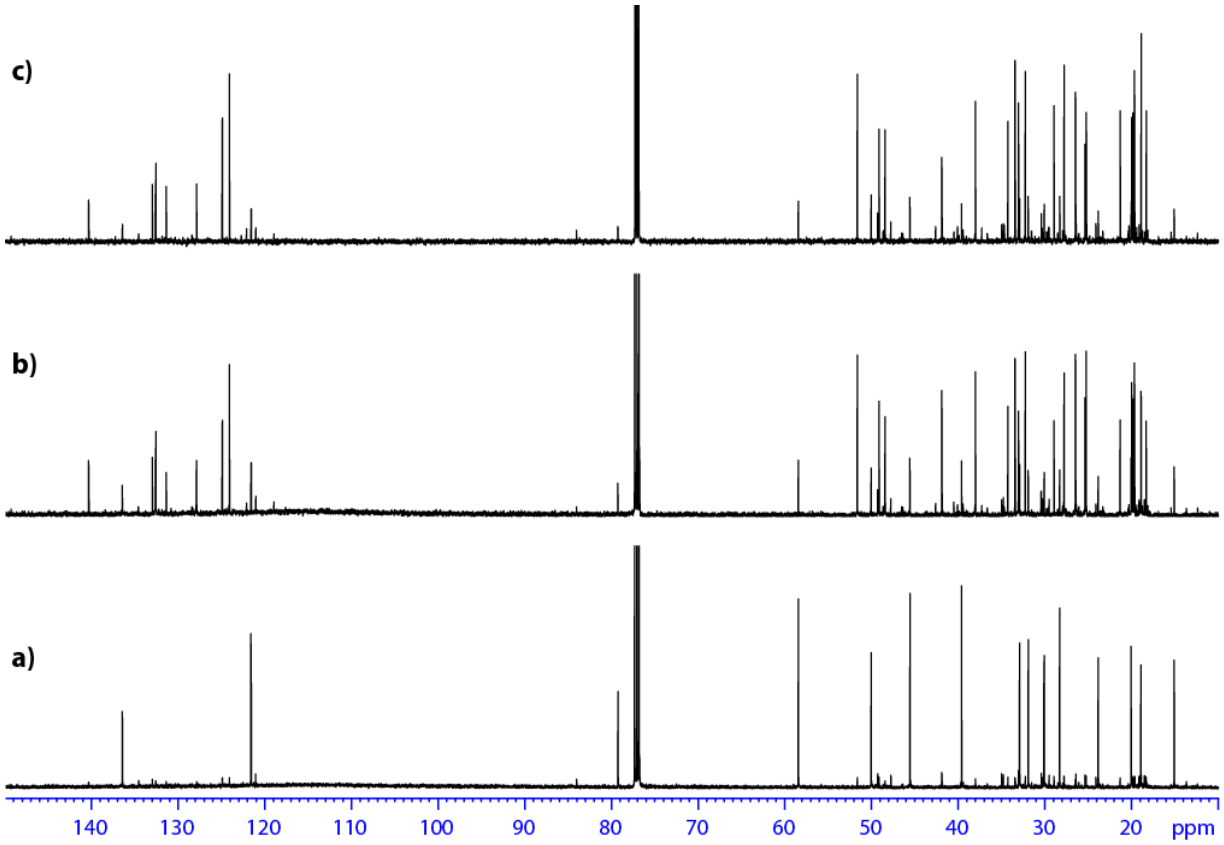

Figure S1. Full ^{13}C-NMR spectra of tamariscol rich fraction (>95%) acquired in $CDCl_3$ (150.90 MHz, 300K) at **a)** 30 min, **b)** 12h and **c)** 6 days respectively, after sample preparation.

Table S3. Brasiladiene-like constituents detected in the Corsican *C. conicum* extracts

Compound [1]	**LRIa** [2]	**RIa** [3]	**RIp** [4]	**%** [5]		
				EO	**MAC**	**SPME**
brasila-1,10-diene	1307	1305	1403	0,8	1,4	3,8
brasila-5,10-diene (**10**)/2	1335	1335	1495	5,4	2,4	5,3
brasila-5(10),6-diene (**12**)/4	1370	1372	1495	2,0	1,8	1,9
brasila-1(6),5(10)-diene (**11**)/3	1444	1441	1601	5,3	2,5	4,7
conocephalenol	1497	1492	1913	5,6	19,2	0,5
tamariscol	1533	1537	1929	0,4	-	-

[1] Order of elution is given on apolar column (Rtx-1) [2] LRI_A: Literature retention indices on apolar column reported from literature [1]. [3] RI_A: Retention indices on Rtx-1 (apolar) column [4] RI_P: Retention indices on Rtx-Wax (polar) column. EO: Essential oil, HY: Hydrosol, MAC: diethyl oxide maceration, SPME: Solide phase MicroExtraction

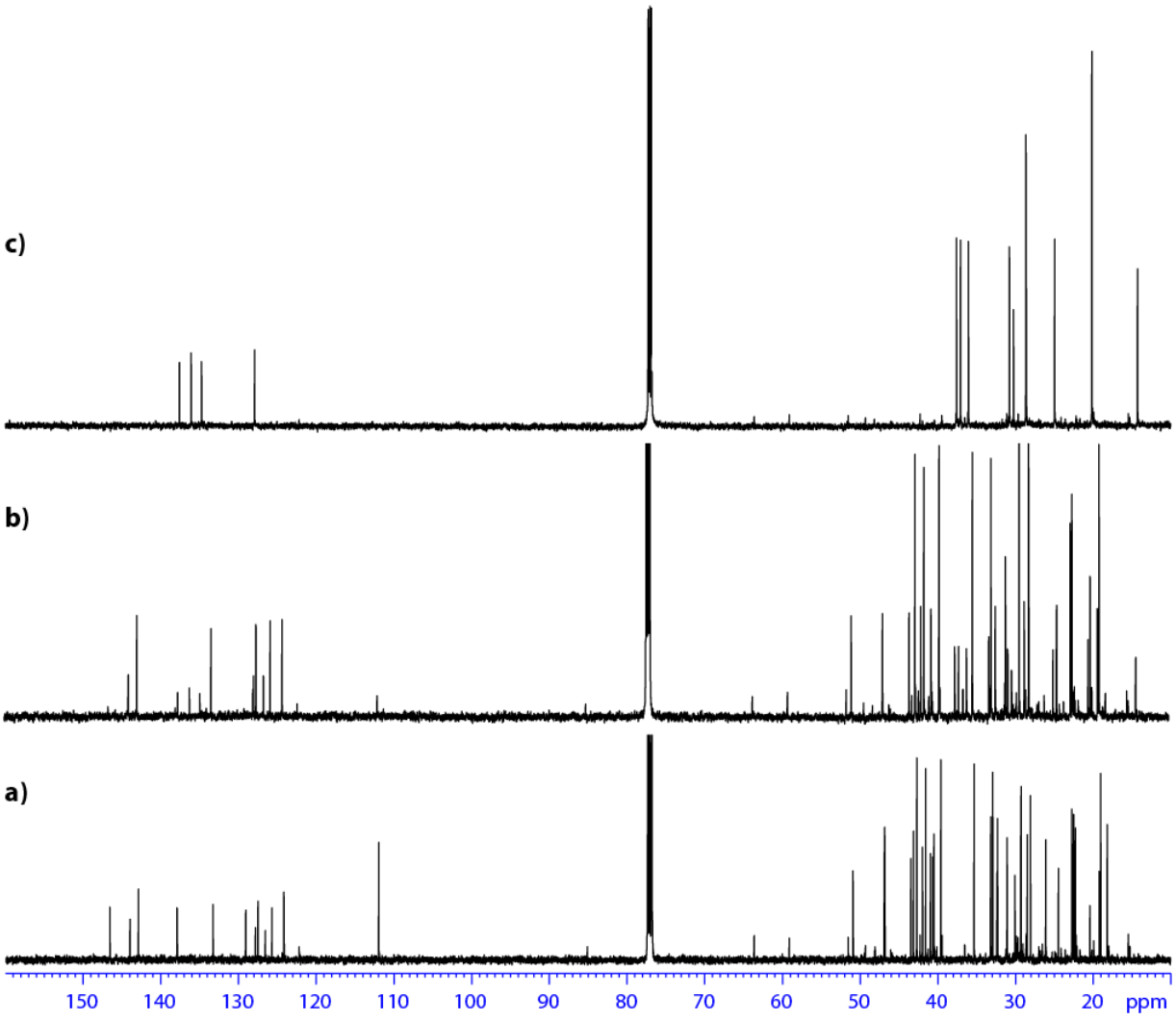

Figure S2. Full ^{13}C-NMR spectra of conocephalenol rich fraction (80%) acquired in $CDCl_3$ (150.90 MHz, 300K) at **a)** 30 min, **b)** 2h and **c)** 6h respectively, after sample preparation.

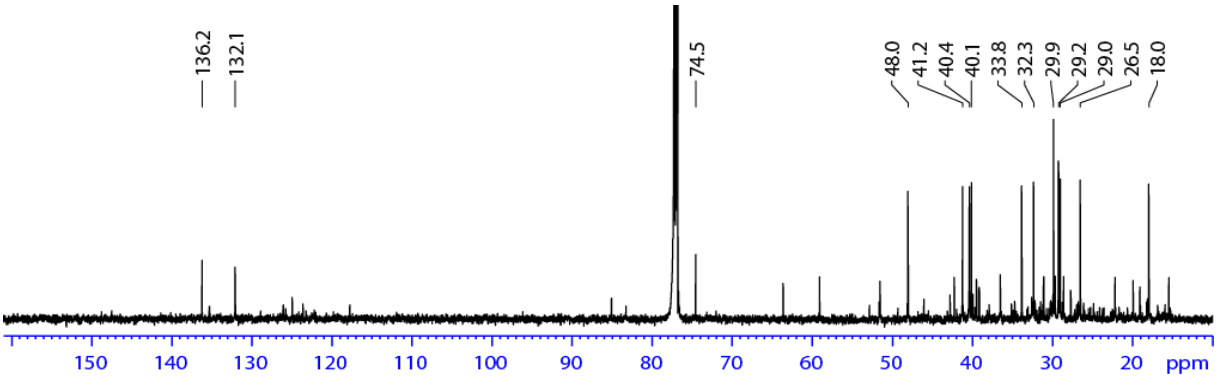

Figure S3: ^{1}H NMR recorded (500MHz, 300K) in $CDCl_3$ filtered on the basic alumine prior to sample dissolution. The labels are showing the obtained chemical shift of conocephalenol; the analyzed fraction contains also (-)-epi-Presilphiperfolan-1-ol [2].

Bibliography

[1] 'Terpenoids Library List - MassFinder'.
https://massfinder.com/wiki/Terpenoids_Library_List (accessed May 13, 2019).

[2] S. C. Pinto *et al.*, '(−)-epi-Presilphiperfolan-1-ol, a new triquinane sesquiterpene from the essential oil of Anemia tomentosa var. anthriscifolia (Pteridophyta)', *Tetrahedron Lett.*, vol. 50, no. 33, pp. 4785–4787, Aug. 2009, doi: 10.1016/j.tetlet.2009.06.046.